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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,976	09/30/2003	Gerald Francis McBrearty	AUS920030642US1	4954

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EXAMINER

DOAN, DUC T

ART UNIT PAPER NUMBER

2188

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,976

Applicant(s)

MCBREARTY, GERALD FRANCIS

Examiner

Duc T. Doan

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/3/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claims 1-29 are in the application.

Claims 1-29 are rejected.

Claim Rejection 35 USC 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-29 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 21 is not limited to tangible embodiments. In view of applicants' disclosure, specification page 16, lines 2-8, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., RAM, CDROM, page 20, line 12) and intangible embodiments (e.g., may take the form of coded format, page 20, line 17). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

All dependent claims are rejected as having the same deficiencies as the claims they depend from.

Computer executable instructions, per se, are merely functional descriptive material not carried by or embodied in either a memory or a carrier signal. Computer executable instructions, per se, are not statutory since the computer cannot access these instructions if there is no appropriate computer readable medium carrying or embodying these instructions in order to realize their functionality. Any language in the specification that support a claimed embodiment of a "computer readable medium" or similar medium (e.g., take the form of coded format) as being indistinguishable from the described and claimed computer executable instructions (or other functional descriptive material, such as data structures – MPEP 2106) does not support a statutory manufacture as claimed. Effectively, under these circumstances, there is only claimed the computer executable instructions (or other functional descriptive material, such as data structures-MPEP 2106) with no "medium" that carries or embodies them. With no "medium" there is no way for a computer to access the instructions (or other functional descriptive material, such as data structures-MPEP 2106 so as to realize the functionality thereof. This is equivalent to merrily claiming computer executable instruction, per se, perhaps in some alternative format and is likewise not statutory under 35 USC 101 for the same reason.

Claim Rejections - 35 USC # 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-29 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As for claims 21,23, there does not appear to be support in the original disclosure for the claim limitation regarding the instructions as recited in the claims 21,23 and the sub instructions. Examiner searches the specification and can not find any recitation on the descriptions for the instructions and the sub instructions recited in the claims. The words instruction and sub instruction are not mentioned in the specifications.

All dependent claim(s) are rejected as having the same deficiencies as the claims they depend from.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,6-14,16-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Mcmichael et al (US Pub 2003/0023826) and in view of Gao (US Pub 2003/0163578).

As for claim 1, Mcmichael describes a method for controlling the behavior of an application when storing data using a logical volume manager, comprising: creating a logical volume (Mcmichael's page 1 paragraph 13); setting a new device type for the logical volume (Mcmichael's page 6 paragraph 60; enumerates volume device objects; stored by device names), wherein the new device type is added to a metadata within the logical volume manager (Mcmichael's page 6 paragraph 60-62 describes volume manager enumerates a new device object for the volume) ; and adding a new device with the new device type (to a kernel space (Mcmichael's page 5 paragraph 55 describes partition managers and other code modules operate in operating system kernel). Although Mcmichael describes a new device is enumerated, Mcmichael does not describe the associating metadata structure for the new device. However, Gao' Fig 2,3 page 1 paragraphs 4-11 describes a device driver configured to support media data types. The device driver is capable of providing the "metadata" of media types it can support to the data link user. It would have been obvious to one of ordinary skill in the art at the time of invention to include media data type as suggested by Gao in Mcmichael's system so that the user-level application (data link user) may query the device driver (data link provider) to determine a type of medium the provider supports, and thereby it can tailor its mode of operation accordingly.

As for claims 2-3,6-8 Gao's pages 2-3 describes the snoop utility can issue ioctl calls to obtain in detail more configuration information corresponding to the device driver's media type, as follows:

As for claims 2-3, the claims recite wherein the step of creating the logical volume includes supplying the logical volume manager with a new device type for the logical volume (claim 2; page 2 paragraphs 18,23,24); using the new device type to indicate to the application that the application may perform a particular behavior defined by the new device type (claim 3; page 2 paragraphs 19 if media type is Ethernet, the snoop utility operates accordingly).

As for claims 6-7 the claims recite wherein the particular behavior defined by the new device type includes allowing the application to enable a new feature within the application (claim 6, Gao's page 4 example 1 PPP_Ipv6 illustrates features associating with Ethernet_Ipv6 protocol); wherein the particular behavior defined by the new device type includes allowing the application to reduce a currently supported feature set within the application (Claim 7, Gao's page 4 Example 1 PPP_Ip illustrates features associating with Ethernet_IP protocol).

As for claim 8, the claim recites wherein the particular behavior defined by the new device type includes allowing the application to prevent older versions of the application from using the logical volume. The claim rejected based on the same rationale as in the rejection of claims 6-7. Gao's page 4 example 1 suggests the user can select to apply new version of Ethernet protocol over an old version).

As for claim 9, the claim recites wherein the particular behavior defined by the new device type includes allowing the application to test the application's expected behavior on a

different volume manager. The claim rejected based on the same rationale as in the rejection of claims 4-5.

As for claim 10, Mcmichael describes wherein the new device typeset for the logical volume is non-changeable for the life of the logical volume (Mcmichael's page 6 paragraph 60, the volume device name is guaranteed to be unique during a boot session).

Claims 11,12 rejected based on the same rationale as in the rejection of claim 1.

Claim 13 rejected based on the same rationale as in the rejection of claim 2.

Claim 14 rejected based on the same rationale as in the rejection of claim 3.

Claim 16 rejected based on the same rationale as in the rejection of claim 6.

Claim 17 rejected based on the same rationale as in the rejection of claim 7.

Claim 18 rejected based on the same rationale as in the rejection of claim 8.

Claim 19 rejected based on the same rationale as in the rejection of claim 9.

Claim 20 rejected based on the same rationale as in the rejection of claim 10.

Claims 4-5,15 rejected under 35 U.S.C. 103(a) as being unpatentable over Mcmichael et al (US Pub 2003/0023826), Gao (US Pub 2003/0163578) as applied to claims 3,14 respectively and further in view of Irwin, Jr et al (US 5566331).

As for claims 4-5, the claims recite wherein the particular behavior defined by the new device type includes allowing the application to determine a location to begin writing data in a database (claim 4; Irwin's column 17 lines 1-7 describes of a new device driver capable of to translate I/O functions into I/O commands of a specific architecture of storage device associated with the personality module); wherein the location to begin writing data in the database includes

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block zero of the logical volume control block (claim 5; Mcmichael describes a partition manager capable of detect available partitions in storage devices, page 4 paragraphs 37,42; to present partitions of a disk to logical volume manager, page 5 paragraphs 47-48; Mcmichael describes the flexibility of the internal logical representation of each of partitions and logical volumes in the system such as the first partition can be relocated to any storage device; Mcmichael's page 1 paragraphs 5-10). It would have been obvious to one of ordinary skill in the art at the time of invention to include the device driver as suggested by Irwin in Mcmichael's system to allow the system to deal with several different types of block storage devices (Irwin's column 16 lines 53-55).

Claim 15 rejected based on the same rationale as in the rejection of claim 5.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allen et al (US 5546557).

Baranovsky et al (US 5897661).

When responding to the office action, Applicant is advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Doan whose telephone number is 571-272-4171. The examiner can normally be reached on M-F 8:00 AM 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin L. Ellis
Primary Examiner

Kevin L. Ellis